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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,510	12/11/2003	Hitoshi Kato	03742 /LH	5836

1933 7590 06/22/2006

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EXAMINER

WARREN, DAVID S

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5/6

Office Action Summary	Application No. 10/735,510	Applicant(s) KATO ET AL.	
	Examiner David S. Warren	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 17-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 17-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

The following is a quotation of the appropriate paragraph of 35 U.S.C. 101 that form the basis for the rejections under this section in this Office Action:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 29 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer program is recited without a computer-readable medium which is required to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101 (MPEP 2106).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 3 and 17 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sitrick (6,084,168). Regarding claims 1, 3, 17, and 20, Sitrick disclose the use of a reference-performance data supplying unit (fig. 2A; fig. 2E), an actual-

performance data supplying unit (280, fig. 2E), a reference on-period for extracting on-periods, i.e., the period between note-on and note-off, (the time between note-on and note-off is the note duration; Sitrick teaches detecting duration, col. 11, lines 29 – 34), a real on-period (Sitrick teaches comparing the real and actual durations; col. 11, lines 29 – 34), and a judging, comparing, and evaluation score calculating unit (col. 11, 3rd and 4th paragraph). Sitrick determines a “graded score” when comparing pitches (see col. 11, 3rd paragraph) this is synonymous with Applicant’s “adjusting an evaluation score in accordance with whether or not the comparing unit determines that both the pitches are the same.” For pitch and timing comparison and evaluation see Sitrick col. 11, lines 29 – 34). Regarding claim 2, the composition used in the Sitrick invention is stored in a library (120) and selected by a user (210, fig. 2A), the time between note-on and note-off (i.e., the duration) would inherently be stored in a memory (i.e., the library, see second sentence of Abstract) and read out (music reproduced without the proper durations would not be useful). Regarding claim 18, Sitrick discloses the use of timing of notess and duration of notess – this is deemed to meet the limitation of plural pitches and plural sound-generation events. Regarding claim 19, Sitrick discloses the use of setting and evaluating the timing of a performance (col. 11, lines 29 – 34) and the use of “predefined performance goals ” (col. 11, lines 34 – 36). The Examiner maintains that these “predefined performance goals” are ranges (i.e., within a time period) set by the system within which a musician is expected to perform, i.e., playing within the limit results in a higher score, playing outside the limit results in a lower score.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 21 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitrick in view of Chantzis (6,417,435). Regarding claims 21 and 29, all limitations have been discussed supra (and are taught by Sitrick) except the period setting unit for setting an evaluation period. Chantzis discloses the use of “segments” which are “at least two notes” - these segments are evaluated and stored (see col. 7, lines 49 – 51). It would have been obvious to one of ordinary skill in the art to combine the teachings of Sitrick and Chantzis to obtain an performance evaluation apparatus wherein only periods (or portions or segments) were evaluated. The motivation for making this combination is that many musical performances are very long, while only a small portion (or period) is challenging, it would greatly expedite learning if only the difficult portions could be practiced and evaluated. Regarding claim 22, these limitations have been discussed supra with respect to claim 1. Regarding claim 23, as stated supra, the “segment” of Chantzis is “at least two notes” – therefore, the period is set in accordance with a number of notes. Regarding claim 24, Sitrick shows the use of time segmenting (col. 27, first paragraph). Regarding claim 25, Sitrick discloses the use of D.S. Coda and repeating difficult sections (col. 11, lines 13 – 14). The Examiner maintains that a

Art Unit: 2837

D.S. Coda is synonymous with "identification data" within the performance data.

Regarding claim 26, each note in Sitrick (and Chantzis) is compared and evaluated. It is broadly interpreted that each note is evaluated within its own evaluation on-period.

Regarding claim 27, both Sitrick and Chantzis disclose setting the tempo of the evaluation period (see Chantzis, col. 10, lines 25 – 32). Regarding claims 28 and 30 – 34, Sitrick discloses the use of determining a "graded score." While Sitrick is silent as to whether points are added or subtracted when a performance matches a pitch or duration, Chantzis discloses determining whether the "performer's performance has fallen below a pre-determined proficiency level" (col. 13, lines 64 – 67). The Examiner maintains that the use of "fallen" proficiency indicates that an evaluation values have been subtracted and that higher scores would indicate added values. Furthermore, Chantzis' use of adding and subtracting evaluation values is deemed to be functionally equivalent to that system applied by the Applicant. Still further, it is well-known to add and subtract points for correct or incorrect responses on many kinds of tests. It would have been obvious to one of ordinary skill in the art to combine the teachings of Sitrick and Chantzis to obtain a graded scoring system wherein points were added for correct responses (to playing pitch and duration) and subtracted for incorrect responses. The motivation for making this combination is so a user could accurately quantify progress.

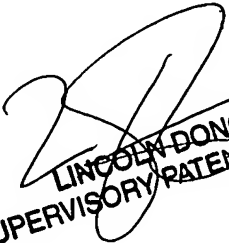
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dsw


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER